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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,564	04/17/2001	Ikuo Kawauchi	003510-092	5901

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EXAMINER
WALKE, AMANDA C

ART UNIT	PAPER NUMBER
1752	

DATE MAILED: 12/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

mk-3

Office Action Summary	Application No.	Applicant(s)	
	09/835,564	KAWAUCHI, IKUO	
	Examiner	Art Unit	
	Amanda C Walke	1752	

-- The MAILING DATE of this communication appears n the cover sheet with the correspondence address --

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☒ Claim(s) *1 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: There is an extra space on page 11.

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Objections

4. Claims 1 and 6 are objected to because of the following informalities: In claim 1, line 11, the "a' should be a "the". In both claims, "alkinyl" should be "alkynyl", "which may have substituents" should be "which may be substituted", and "methyne" should be "methine". Appropriate correction is required.

******NOTE: The examiner notes that the present claims 1 and 6 recite the limitation " 80% by weight or more of a solvent having a boiling point lower than 100 ° C in a solvent having a boiling point lower than 200 ° C." By reading this, it appears that both solvents may have boiling points of lower than 100 ° C. Therefore, the claim has been interpreted as requiring a solvent system containing " 80% by weight or more of a solvent having a boiling point lower than 100 °

C " including an amount up to 100 % by weight since both solvents may have boiling points less than 100 ° C .

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1, 2, 5, 6, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimazu et al (6,294,311).

Shimazu et al disclose a lithographic printing plate having high chemical resisitance comprising a substrate, an underlayer, and a top layer. The alkaline soluble underlayer comprises a combination of polymeric materials and infrared absorbing materials (photothermal conversion materials). Preferably the infrared absorbing materials are dyes or pigments such as carbon black (column 3, lines 41-51, column 4, line 24 to column 6, line 12, and column 6, line 25- column 7, line 9). The preferred infrared absorbing material is a dye used in the examples, and is the same as the presently claimed dye (1). A preferred solvent for use in the material is a mixture of methanol/dioxolane/methyl lactate (43:43:14) wherein the only high boiling point solvent (as defined by the present invention) is the methyl lactate, which comprises only 14 % by wt of the solvent mixture (and is used in the examples of the reference). The underlayer is

formed by coating the layer onto the substrate then drying it. The plate if the reference is preferably a positive-working plate (column 15, lines 25-30).

With respect to the "dissolved or dispersed...200 ° C" in claims 1 and 2, this is a product by process limitation. The product consists of a printing plate precursor comprising a photosensitive layer which contains a cyanine dye and a polymer insoluble in water and soluble in aqueous alkali solution, not what the solvent system consisted of during the process of making the product. M.P.E.P. § 2113:

7. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)... "The Patent Office bears a lesser burden proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessman*, 180 USPQ 324, 326 (CCPA 1974). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al (5,493,971) in view of DeBoer (4,973,572).

Lewis et al disclose a laser-imageable printing plate comprising a surface layer that is radiation absorptive and a protective layer coated on a substrate. The surface layer comprises a polymeric material and an infrared absorbing agent, which is preferably a dye or pigment . In the examples of the reference, only one solvent is employed. That solvent is 2-butanone (methyl ethyl ketone), which is a low boiling point solvent (as defined by the present specification). The broadest interpretation as described above, it appears that this solvent system would meet the present method claim limitations. If there is only a low boiling point solvent, then the 100% of the residual solvents in the layer after drying would be the low boiling point solvents, which would meet the limitations of the present claims 3, 4, 8, and 9 (see columns 7 and 8). The plate of the reference may be positive or negative-working (column 6, lines 54-56). Preferred infrared absorbing dyes include those of 10 cited references. DeBoer is included as one of the 10 cited references, and is the only one to teach dyes falling within the scope of the present claim limitations.

As discussed above, DeBoer discloses cyanine dyes suitable for use in the photosensitive layer of the plate of Lewis et al. The exemplified dyes appear to fall within the scope of the

present formula (I), and dye compound 13(used in the examples in table 3) is the presently claimed dye (1).

Although Lewis et al generally teaches the inclusion of dyes meeting the present claim limitations (by citing 10 references, one of which disclosing the presently claimed dyes), the reference does not require these components with sufficient specificity to constitute anticipation.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have prepared the photosensitive layer of the plate of Lewis et al, choosing to include a dye falling within the scope of the present claim limitations as Lewis et al expressly suggests the addition of the dye and therefore is an obvious formulation.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagasaka et al (5,814,431) is cited for its teachings of dyes suitable for use in a photosensitive layer of a printing plate. Specifically, the reference teaches obvious variants of presently claimed dyes 2-5. Additionally, Haley et al(5,466,557), Leenders (5,972,556), Nishimiya et al (6,030,748), Murata et al (6,074,802), Urano et al (6,110,646), Vershueren et al (6,152,036), Urano et al (6,200,727), Nguyen et al (6,261,740), Hauck et al (6,309,792), Fujita et al (6,342,335), Saviar-Hauck et al (6,358,669), Aoshima (2002/0048722), Nagasaka et al (6,410,207), Oohashi et al (6,455,224), Kawamura et al (2002/0142247), and Horne et al (2002/017874) are cited for their teachings of similar materials.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C Walke whose telephone number is 703-305-0407. The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Amanda C Walke
Examiner
Art Unit 1752

ACW
December 4, 2002

JANET BAXTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700